

EXHIBIT B

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

IMRA AMERICA, INC., a Michigan
corporation,

Plaintiff/Counterdefendant,

v.

IPG PHOTONICS CORPORATION, a
Delaware corporation,

Defendant/Counterclaimant.

AND RELATED COUNTERCLAIMS.

) Case No.: 2:06-cv-15139

) Judge: Hon. Anna Diggs Taylor

) Magistrate: Hon. Mona K. Majzoub

JOINT CLAIM CONSTRUCTION STATEMENT

In accordance with the Court's Amended Scheduling Order, the parties submit the Joint Claim Construction Statement with their respective proposed claim constructions for certain claim terms in U.S. Patent No. 5,818,630. (Exhibit A.)

Respectfully submitted by,

Dated: December 7, 2009

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Dated: December 7, 2009

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Attorneys for Defendant
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CERTIFICATE OF SERVICE

I certify that on December 7, 2009, I electronically filed the foregoing Joint Claim Construction Statement using the ECF system which will send notification to the attorneys of record.

A handwritten signature in cursive script, appearing to read "Karen Hopf", is written over a horizontal line.

Karen Hopf

UNITED STATES DISTRICT COURT
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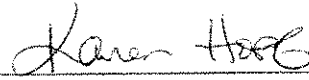
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Karen Hopf

EXHIBIT A TO JOINT CLAIM CONSTRUCTION STATEMENT
IMRA America, Inc. v. IPG Photonics Corporation
Case No. 2:06-15139 (E. D. Mich.)

Claim 1	IPG's Proposed Construction	IPG's Supporting Evidence	IMRA's Proposed Construction	IMRA's Supporting Evidence
An optical amplification system, comprising: a laser source generating an input beam having a nearly diffraction limited mode; a <u>multi-mode fiber amplifier</u> ;				
	The parties agree that the term " <u>multi-mode fiber amplifier</u> " ¹ means a multi-mode fiber capable of amplifying an input beam.			
	The parties further agree that the term " <u>multi-mode fiber</u> " ² means an optical fiber with a V-value greater than 2.41, where $V = \frac{2\pi a}{\lambda} NA$ a is the core radius of the optical fiber, NA is the core numerical aperture of the fiber, and λ is the signal wavelength of the input beam.			
a <u>mode converter</u> receiving the input beam and <u>converting the mode of the input beam to match a fundamental mode of the multi-mode fiber amplifier</u> , and providing a <u>mode-</u>	The term " <u>mode converter</u> " means an optical imaging system, such as a lens system, a section of tapered fiber, or a combination thereof, capable of matching the mode of a	Intrinsic evidence: '630 Patent Abstract 1:43-60 2:1-7 3:9-21 3:34-44 3:45-47	The term " <u>mode converter</u> " means an element capable of matching the mode of a multi-mode amplifier fiber.	Intrinsic evidence: '630 Patent, including 6:6-13 6:33-44 6:54-57 7:6-14 7:47-51 9:24-30

¹ This term also appears in dependent claims 10-12, 27, 28, 36, 39, 46, 47, 48, 49.² This term also appears in dependent claim 31.

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IMRA America, Inc. v. IPG Photonics Corporation
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Claim 1	IPG's Proposed Construction	IPG's Supporting Evidence	IMRA's Proposed Construction	IMRA's Supporting Evidence
<p><i>converted input beam</i> to said multi-mode fiber amplifier; and</p>	<p>multi-mode fiber amplifier.</p> <p>The term "<i>converting the mode of the input beam to match a fundamental mode of the multi-mode fiber amplifier</i>" means converting the mode of the input beam to cause it to match a fundamental mode of the multi-mode fiber amplifier.</p>	<p>6:6-13 6:54-57 7:47-51 9:24-30 10:1-10 10:19-40 10:49-52 11:39-46 12:20-23 13:11-25 13:52-61 14:18-26 FIGS. 1, 5, 6, 7, 9-12</p> <p>'630 patent application (as filed) at 34 (IMRA0000058).</p> <p>Amendment dated June 1, 2009 in Reexam. Control No. 90/008,971 at 15-20, 35.</p>	<p>The term "<i>converting the mode of the input beam to match a fundamental mode of the multi-mode fiber amplifier</i>" does not need to be construed. It takes its ordinary meaning to a person of ordinary skill in the art: "converting the mode of the input beam to match a fundamental mode of the multi-mode fiber amplifier."</p>	<p>10:1-10 10:19-40 10:49-52 11:39-46 12:20-23 13:12-25 13:52-61 14:18-26 FIGS. 1, 5, 6, 7, 9-12 Abstract Ex Parte Reexamination Certificate, U.S. 5,818,630 C1 at col. 1, lines 21-27 the prosecution history for '630 Patent and Reexamination No. 90/008,971.</p>
	<p>The term "<i>mode-converted input beam</i>" means an input beam whose mode has been converted to match a fundamental mode of the multi-mode fiber amplifier.</p>	<p>Extrinsic evidence: Taverner at 378-9 (IPGI 009341-IPGI 009343) Nisoli at 189 (IPGI 007918-007923) Strasser at 348-349</p>	<p>The term "<i>mode-converted input beam</i>" does not need to be construed. It takes its ordinary meaning to a person of ordinary skill in the art: "mode converted input beam"</p>	<p>Extrinsic evidence: IMRA does not concede or agree that it is necessary or appropriate to consider extrinsic evidence in connection with interpreting this claim limitation, but extrinsic evidence that supports IMRA's proposed construction</p>

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Claim 1	IPG's Proposed Construction	IPG's Supporting Evidence	IMRA's Proposed Construction	IMRA's Supporting Evidence
		(IPGI 009329-IPGI 009330) Yang at 1044-45 (IMRA000178-IMRA000180) Yang Thesis at 89-92 (IPGI007812-7815) U.S. Patent No. 5,074,633 to Cohen at 1:50-68 (IMRA000259-64) U.S. Patent No. 5,513,196 to Bischel at 17:4-57, 18:1-20, FIG. 8 (IPGI 009672-009691) Declaration of Dr. Wayne Harvey Knox dated May 31, 2009, and filed in Reexam. Control No. 90/008,971 at 6-9. Response to German Patent Office dated September 11, 2006 regarding IMRA America Patent		upon which IMRA may rely is testimony of Dr. Wayne H. Knox.

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Claim 1	IPG's Proposed Construction	IPG's Supporting Evidence	IMRA's Proposed Construction	IMRA's Supporting Evidence
		<p>Application DE 19828154 at 2-6. (IPGI 1401653-IPGI 1401675)</p> <p>Response to German Patent Office dated March 29, 2007 regarding IMRA America Patent Application DE 19828154 at 3 (IPGI 1401653-IPGI 1401675)</p> <p>U.S. Patent No. 7,113,327 to Gu at 9:34-53, FIG. 8 (IMRA007837-53)</p> <p>U.S. Patent No. 7,190,511 to Galvanauskas at 3:9-16, 5:51-66, 10:5-13 (IMRA008826-40)</p> <p>Expert Report of Wayne H. Knox, Ph.D. on Infringement dated November 6, 2009 at 19-24, 34-36.</p>		

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Claim 1	IPG's Proposed Construction	IPG's Supporting Evidence	IMRA's Proposed Construction	IMRA's Supporting Evidence
a pump source coupled to said multi-mode fiber amplifier, said pump optically pumping said multi-mode fiber amplifier,		IPG may rely further on a declaration of its expert Philip H. Bucksbaum.		
said multi-mode fiber amplifier providing at an output thereof <u>an amplified beam substantially in the fundamental mode</u> .	The term <u>an amplified beam substantially in the fundamental mode</u> means an amplified beam having substantially all of its energy content in the fundamental mode.	<p>Intrinsic evidence:</p> '630 Patent Abstract 4:5-13 4:23-25 4:36-43 5:19-28 6:6-17 6:45-7:46 8:43-65 10:1-18 13:12-25 14:27-33 FIGS. 1-4	<p>The term <u>an amplified beam substantially in the fundamental mode</u> does not need to be construed. It takes its ordinary meaning to a person of ordinary skill in the art: "an amplified beam substantially in the fundamental mode."</p>	<p>Intrinsic evidence:</p> '630 Patent including: 5:19-28 6:6-17 6:45-7:46 7: 6-14 8:43-65 10:1-18 13:12-25 14:27-33 16:18-25 FIGS. 1-4 Abstract the prosecution history for '630 Patent and Reexamination No. 90/008,971.
		<p>Extrinsic evidence:</p> Expert Report of Wayne H. Knox, Ph.D. on Infringement dated November 6, 2009 at 24-27, 36-38, 45-46.		<p>Extrinsic evidence:</p> IMRA does not concede or agree that it is

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Claim 1	IPG's Proposed Construction	IPG's Supporting Evidence	IMRA's Proposed Construction	IMRA's Supporting Evidence
		<p>Rebuttal Expert Report of Wayne H. Knox, Ph.D. on Invalidity dated January 25, 2008 at 40-44.</p> <p>IPG may rely further on a declaration of its expert Philip H. Bucksbaum.</p>		<p>necessary or appropriate to consider extrinsic evidence in connection with interpreting this claim limitation; but extrinsic evidence that supports IMRA's proposed construction upon which IMRA may rely is testimony of Dr. Wayne H. Knox. <i>See also</i> Expert Report of Philip H. Bucksbaum on invalidity dated December 21, 2007 at 11-13.</p>

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Claim 24	IPG's Proposed Construction	IPG's Supporting Evidence	IMRA's Proposed Construction	IMRA's Supporting Evidence
The optical amplification system according to claim 1, further comprising a <u>mode filter</u> receiving the amplified beam and providing a <u>mode-filtered beam</u> .	The parties agree that the term " <u>mode filter</u> " means a device that removes energy from one or more modes of a beam. The parties agree that the term " <u>mode-filtered beam</u> " means a beam that has had energy removed from one or more of its modes by a mode filter.			

³ This term also appears in dependent claim 25.